حمل الآن

مجانا وحصريا

المراجعة رقم (1)

الترم الثانى





Unit 1 revision

1) Choose the correct ansewr:-

1- On heating copper hydroxide we obtain :
(Copper carbonate and water – copper oxide and water – copper and hydrogen – copper oxide and hydrogen)

2- In thermal decomposition reactions, the compound is decomposed into:
(Its simple components – its primary elements – other compounds – all the previous)

3- When dilute hydrochloric acid is added to calcium carbonate..................gas is evolved.
a. CO_2 b) H_2 c) O_2 d) CO

4- A process that involves the splitting of compounds into simpler compounds by the effect of heat is called................
a. simple substitution b) thermal decomposition
c) electrolysis d) direct combination

5- The blue colour of copper sulphate disappears and .... is formed by heating.
a. black ppt b) red colour c) yellow ppt d) black colour

6- The following elements can replace hydrogen in dilute acids except..................element.
a. Magnesium b) zinc c) copper d) sodium

7- The oxidizing agent is the compound which.......................during the chemical reaction.
a. loses hydrogen b) gains oxygen c) loses oxygen

8- The percentage of hydrogen increases during ....reactions.
a) neutralization b) oxidation c) reduction d) substitution

9- In the reaction between sodium and chlorine to form sodium chloride, the oxidizing agent is................
a) sodium b) chlorine c) sodium chlorine d) both sodium and chlorine

2) Writ the scientific term :

1-The breaking up of the molecules of the reactants and the forming of new coherences.
2- A chemical process where the atom gains one or more electron.
3-It is the substance which loses an electron or more during a chemical reaction.
4- A reaction where an element substitutes another one.
5-A process of splitting compounds into simpler compounds by the effect of heat.
6- The arrangement of metallic elements according to decreasing chemical activity.
7- A process in which an element displaces another element in one of its salt solution.
8- It is the double exchange between the radicals of two compounds to give two other new compounds.
9-A reaction between acid and alkali to give salt and water.
10- A chemical substance which helps to increase the speed of the reaction
11-The chemical process which leads to the increase of oxygen or decrease of hydrogen
12- Two processes take place at the same time during the chemical reaction
13-A substance which gains one or more electrons during a chemical reaction.
14- The chemical process in which the atom of the substance gains one electron or moreduring the chemical reaction.

3) Write the balanced chemical equations for the following:

1- The reaction between hydrochloric acid and sodium hydroxide.

……………………………………………………………………

2- Adding silver nitrate solution to sodium chloride solution.

……………………………………………………………………

3- The effect of heat on red mercury oxide.

……………………………………………………………………

4- The reaction of zinc with diluted hydrochloric acid.

……………………………………………………………………

5-The effect of heat on sodium nitrates.

……………………………………………………………………

6- The reaction of water with sodium.

……………………………………………………………………



7- The reaction between hydrochloric acid and calcium hydroxide.

……………………………………………………………………

8- Insertion of a magnesium ribbon in a solution of copper sulphate.

……………………………………………………………………

9- The reaction of Aluminium with diluted hydrochloric acid.

……………………………………………………………………

10- Reduction of hot copper oxide by hydrogen.

……………………………………………………………………

4) Compare between:

1- Heating of metal oxide and metal hydroxide.

……………………………………………………

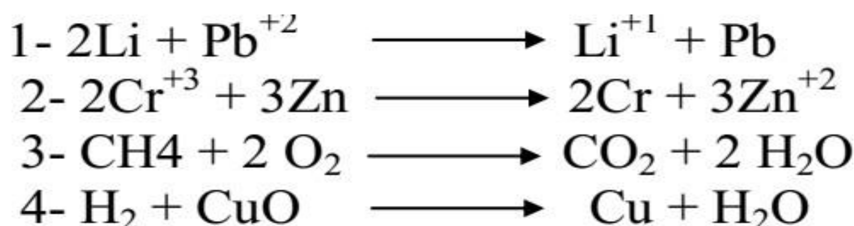
2- Oxidation and reduction.

……………………………………………………………………

3- Simple substitution and double substitution reactions.

……………………………………………………………………

5) Identify the process of oxidization, reduction, oxidizing factor and reducing factor in each of the following reactions:



1- $2Li + Pb^{+2} \longrightarrow Li^{+1} + Pb$

2- $2Cr^{+3} + 3Zn \longrightarrow 2Cr + 3Zn^{+2}$

3- $CH4 + 2\,O_2 \longrightarrow CO_2 + 2\,H_2O$

4- $H_2 + CuO \longrightarrow Cu + H_2O$

6) Complete the following statements:

1- Oxidization is a chemical process where the atom .... an electron or more.
2……factor is the substance which gains one electron or more during a reaction.
3- During ....reactions, the compound breaks up by heat into its simple components.
4is the reaction between an acid and an alkali to form salt and water.
5is the substance which gives oxygen and takes away hydrogen.
6- At the beginning of the reaction, the concentration of reactants is………%
7- The change in the concentration of reactants and resultants in a time unit is ……..
8- The increase in concentration of reactants makes the chemical reaction................
9- The reaction of contributing compounds is ....
10- Sodium chloride powder reacts................................. than a cube of sodium chloride
11- A substance which increases the chemical reaction without changing in the reaction.........
12- $NaCl + AgNo_3 \longrightarrow$ .... + ...
13- $Cu(OH)_2 \longrightarrow$ .... + ...
14- $2NaNO_3 \longrightarrow$ .... + ...
15- $2HgO \longrightarrow$ .... + ...

16- The size of the solute molecules in the real solution is.....................than that in the colloidal solution.
17- In the.................. solution, the solute molecules can be distinguished by the naked eye.
18- It is possible to dissolve more solute in the.................................solution.
19- In the stomach, there is.................................that help in the digestion of proteins
20- Solution can be classified in terms of homogeny into .... and ....
21- The break up of existed bonds in the molecules of reactants and the forming of new bonds is called.....................
22- The speed of chemical reactions ....due to the increase of temperature.
24- Oxidation and reduction are two .... processes.
25- The components of the .... solution can be separated by refining or filtration.

26- Most metal sulphates undergo thermal decomposition to give ....and...................
27- The chemical activity series is the arrangement of metallic elements in a............... order according to their ....
28- Chemical reaction is the process in which bonds in reactants are ....and bonds in .... are formed.
29- Oxidation and reduction are two............... processes.
30- The substance that gives oxygen and removes hydrogen is called...............
31- In the following reaction: ($2Mg + CO2 \xrightarrow{\Delta} 2MgO + C$) the oxidizing agent is ……………

7) Put a (✔) or (✘) in front of the following statements and correct the wrongwords:

1-The increase in the concentration of the reactants increases the number of collisions between molecules so that the speed of reaction decreases. (   )

2- Most metal carbonates decompose by heating into metal oxide and carbon dioxide. (   )

3- The reactions of ionic compounds are slower than coordinate compounds. (   )

6- Metallic elements are arranged in an ascending order according to their chemical activity in the C.A.S. (   )

7- No reaction takes place between copper and zinc sulphate. (   )

8- Anhydrous copper sulphate decomposes by heat to give copper oxide and sulphur dioxide. (   )

9- Reduction means gaining of hydrogen . (   )

8) Give reasons :

1- The fridge is used to preserve food.

…………………………………………………………………

2- Using molecule nickel in hydrating oil instead of pieces of nickel.

………………………………………………………………..

3- Magnesium can replace copper in its salt solutions, while opposite cannot happen.

…………………………………………………………………

4- Copper does not react with diluted hydrochloric acid.

…………………………………………………………………

5- When a magnesium strip burns in air a white powder is formed.

…………………………………………………………………

9) Mention the name of the gas in each of the following:

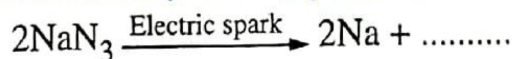
1) Turns lime water milky………..

2) Is obtained by the reaction between dilute hydrochloric acid and magnesium metal…..

3) Increase the glowing of lighted splint………………

Is produced from the thermal decomposition of sodium nitrate…………..

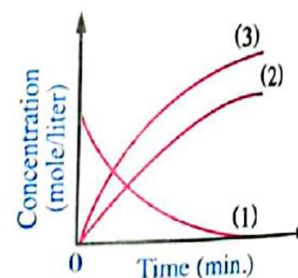
The opposite graph represents the rate of rapid decomposition of the substance of sodium azid (which is present inside the air bag) :



$$2NaN_3 \xrightarrow{\text{Electric spark}} 2Na + ...$$

1. Complete the equation.
2. From the graph, write the name of the compound or the element which is indicated by each number.

....

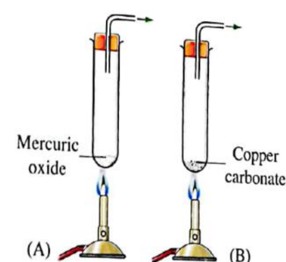


Compare between the colour in test tube A and B

……………………………………………………………

……………………………………………………………

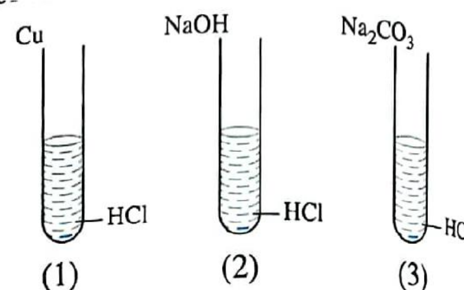
……………………………………………………………



Study the opposite figure, then answer :

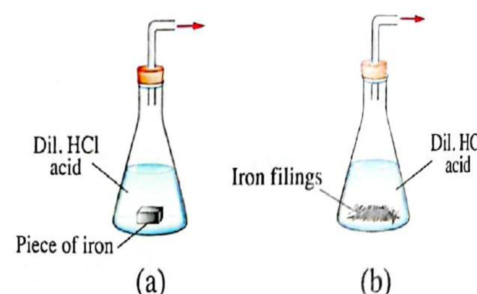
a. In which tube the gas evolved.

b. Mention the type of the reaction in tube 2.



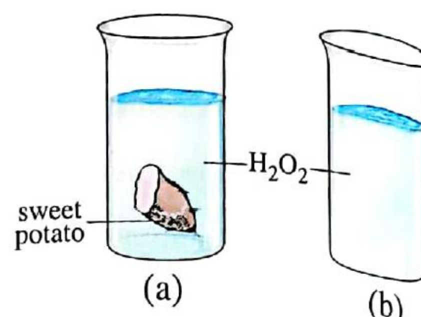
From the opposite figures, Answer :

1. Which reaction is faster (a) or (b).
2. What happens if iron is replaced by copper ?



The two opposite figures illustrate two beakers which contain equal amount of hydrogen peroxide, one beaker contains a piece of sweet potato :

What is the gas produced from Hydrogen peroxide dissociation ?



Unit 2 revision

1) Choose the correct answer:-

1-Direct current can be produced form:
(Electrochemical cells – electric generators – electric power stations)
2-is the measuring unit of the electric charges (coulomb – ampere – volt)
3- The........................is used to measure the electromotive force of a battery.
(Voltmeter – Ammeter – Rheostat)
5- The sliding Rheostat is used to change .... and ....in the electric circuit.
(The current intensity and potential difference – the resistance and potential difference – current intensity and resistance).
6- The Ammeter is used to measure...................... in the electric circuit.
(The potential difference – the current intensity – the resistance)
7- The unit of measuring the electric resistance is .... (Ampere – Volt – Ohm)
8- The unit of measuring the current intensity is..............(Ampere – Volt – Ohm)
9- The direct current is used in .... (Lighting – electric paint – operating refrigerators)
11-One of the properties of the alternating current is ....
(Has constant value – change direction – used in electric paint)

2) Writ the scientific term :

1- The flow of electric charges in a conductor. (   )
2- The electric current of fixed intensity and direction (   )
3- The obstruction the electric current during its flow in the conductor. (   )
4- The flow of electric negative charges in a conducting element (metal wire). (   )
5- The amount of electric charges that flow through a conductor in a certain time. (   )
6- The flow of electric charges in a conductor.
7- The resistance of a conductor that allows the passing of an electric current of 1 Ampere through it when the potential difference between its two ends is 1 Volt.
8- The intensity of the electric current flowing in an electric circuit when an electric charge of 1 Coulomb passes within the conductor's cross section in 1 second.
9- The device used to measure the intensity of the electric current passing in a conductor.
10- The electric state of a conductor that shows the transference of electricity from and to it.
11- The measurement unit of the electromotive force of the electric cell.
12-The measuring unit of the absorbed radiation.
13- The natural conversion of the atoms of some elements in nature as an attempt to reach a more stable composition.
14-The flow of electric negative charges in a conducting material (metal wire).
15-A device used to measure the electric current intensity.
16- The work done to transfer unit of electric charge between two ends of a conductor.

17- The opposition to the flow of electric current in the conductor.

18- The potential difference across the two poles of the battery when the circuit is opened -19

19- The electric current of constant intensity and direction.

20- A type of connection of electric cells used to obtain high e.m.f.

21- The process of conversion of atoms of some elements to reach more stability.

3) Problems:

1- Calculate the potential difference of the two ends of a vacuum cleaner whose resistance is 22 Ohm and the current intensity passing through it is 10 Ampere.

2- You have three similar cells, the electromotive force of each is 1.5 volt, explain by using a diagram how you can connect them to obtain an e.m.f of:

1) 1.5 volts 2) 3 volts 3) 4.5 volts

3- You have 4 similar electric cells. The potential difference of each one is 1.5 Volt. Illustrate by drawing how you connect them to get batteries of emf of:

A- 6 Volt. B- 4.5 Volt. C- 3 Volt in two ways. D- 1.5 Volt.

4- You have four electric cells each of e.m.f 1.2 volt. Show by drawing the method of connecting them to obtain each of the following:

A) 1.2 volt B) 4.8 volt c) 2.4 volt

5- If the potential difference between the terminals of a conductor is 6 volts, and the electric current of intensity 0.5 ampere is passed through it. Calculate the intensity of the electric current passing through this conductor if it is connected with a voltage source of 12 volts.

6- Calculate the quantity of electricity that pass through a conductor of resistance 1000 ohms for 30 minutes, given the potential difference between its two terminals is 220 volts.

7- Calculate the potential difference between two points if the work done to transfer a charge of 600 coulomb is 6600 joule.

4) Complete the following statements:

1 .... is measured by using the Voltmeter and has a measuring unit known as.....................

2- The............................is used to measure the electromotive force of a battery in units known as......................

3- While connecting charged conductors, the electric current passes from the conductor have...................... potential to the conductor have........................potential.

4 - The electric current generated from a dynamo is due to converting energy to .... energy.

5- Cell produce .... current while the dynamo produces current.

6- There are two types of electric current......................and...........................

7- The current intensity due to the flow of 2700 coulomb in 300 second through a cross-section of a conductor equals ....

8- In the electric circuits, the ammeter is connected in............... , while the voltmeter is

9- Volt = $\frac{\text{joule}}{\text{.............} \times \text{second}}$

10- There are two types of electric current which are .... and ....

11- The.....................electric current can be transported only to short distance.

12- There are two methods of connecting electric cells which are .... and...........

13- ....,................ and cesium are natural radioactive elements.

14- Nuclear energy is used in medicine in .... and .... of some diseases.

5) Give reasons:

1- It is better to use the alternating current rather than the direct current.

....

2- The voltmeter is connected to both poles of the battery in the electric circuit

....

3-The areas chosen for storing radioactive wastes should be stable.

....

4- Radiation has genetic effects.

....

5- After the Chernobyl accident, radioactive isotopes were found in the food products.

....

6- Magnesium can replace copper in its salt solutions, while opposite cannot happen.

....

7- Some elements are called radioactive elements.

....

8- The voltmeter is connected across the two poles of a battery.

....

9- Rheostat is used in some electric circuits.

....

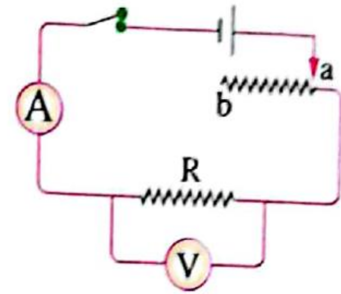
10- Voltmeter is connected between the two ends of a conductor.

....

11- It is better to use alternating current rather than direct current.

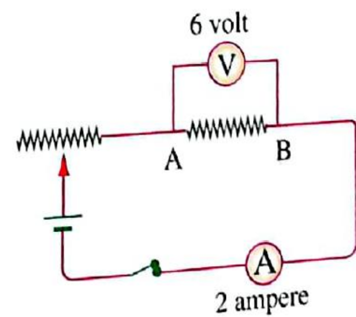
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1. In the opposite closed electric circuit, when the slider of rheostat move from (a) to (b) the reading of voltmeter ....



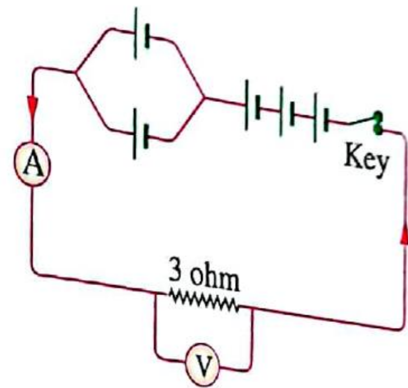
From the opposite circuit, complete the following :

1. The type of resistance A B is ....
2. The value of the resistance A B = ... ohms.



In the following electric circuit in the figure :

If the potential difference between resistance ends equals the total (e.m.f.) of all cells, if the (e.m.f.) of each cell equals 1.5 volt and the resistance 3 ohms. Find the electric current intensity passes in Ammeter.



Units 3&4 revision

1) Choose the correct answer:-

1- The.............hormone releases the needed energy from the food stuffs:
a) Growth b) estrogen c) thyroxin

2- The...................hormone releases the needed energy from the food stuffs
a) growth b) estrogen c) thyroxin

3- The hormone responsible for producing secondary sexual male characteristics isthe ....hormone.
a) Progesterone b) testosterone c) adrenalin

4- The hormone which stimulates the storage of glucose sugar in liver is the:
a) Insulin b) estrogen c) thyroxin d) parathormone

5- The two factors of the hereditary trait are similar in the.......................individual:
a) Pure b) hybrid c) recessive d) Pure and recessive

6-Mendel conducted his experiments in pea plant by using .... pairs of traits.
a) 5 b) 7 c) 9 d) 11

7-The two factors of a hereditary trait are similar in the............... individual.
a) pure b) hybrid c) recessive d) a and c

8-Which one of these traits is recessive in humans …………..
a) curly hair b) wide eyes c) free ear lobe d) straight hair

9- .... put the model of DNA molecule.
a) Ohm b) Mendel c) Watson d) Johansson

10- .... is the part of DNA in the cell nucleus.
a) Gene b) Gamete c) Cytoplasm d) no correct answer

11- DNA molecule consists of.................strands.
a) two b) three c) four d) five

12- The hormone which regulates the level of calcium in the blood is the ……hormone.
a) calcitonin b) thyroxin c) progesterone d) adrenalin

13-The……............hormone liberates the needed energy from the food stuff.
a) growth b) estrogen c) thyroxin d) testosterone

14- Glucagon hormone is secreted by …………..
a) pituitary gland b) thyroid gland c) adrenal gland d) pancreas

2) Explain the following:

1- Mendel's selecting the pea plant to conduct his experiments.
…………………………………………………………………………………

2- When a pure yellow pod pea plant is pollinated with a pure green pod pea plant, it produces plants that are all with green pods.
…………………………………………………………………………

3- The ability of bending the tongue is a dominant trait in the human being
…………………………………………………………………………

4- The model of Watson and Creek of the DNA structure
…………………………………………………………………

5- How the genes perform their functions.
……………………………………………………………

3) Complete the following statements:

1- Dwarfism is a disease caused by the decrease of the secretion of............. hormone at the childhood.

2-The......................hormone is secreted when the rate of glucose sugar increases in the blood.

3- When the amount of glucose decreases in blood, pancreas secretes................. hormone

4- Hormones are directly secreted into the blood stream by..............................

5- Thyroxin is a ....that regulates food assimilation in your body

6- When the secretion of the growth hormone decreases at the childhood, Man is infected by.......................

7................. traits are not transmitted from one generation to another.

8- The scientist …………... is the founder of heredity, he used the seeds of ………... plant, because its flowers are.............. and thus it can self-pollinated.

9- The trait that appears in all individuals of the first generation in Mendel's experiments is................... trait.

10- Chromosome is chemically composed of a nucleic acid called....................which is combined with …………...

11- The two scientists …………... and................... were able to make a model for DNA molecule.

12- In DNA molecule, the nitrogenous base, Guanine pairs with....................base.

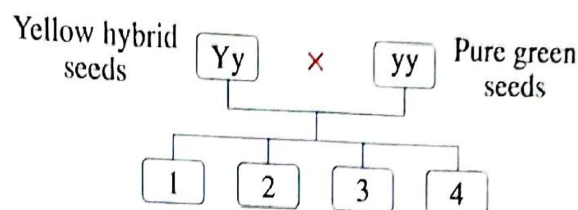
13- The gene mutation occurs as a result of the change in the sequence of …………... of the gene.

4) problems

In the fig. replace the number with a suitable letter to give the produced generation?

………………………………………………

……………………………………………..



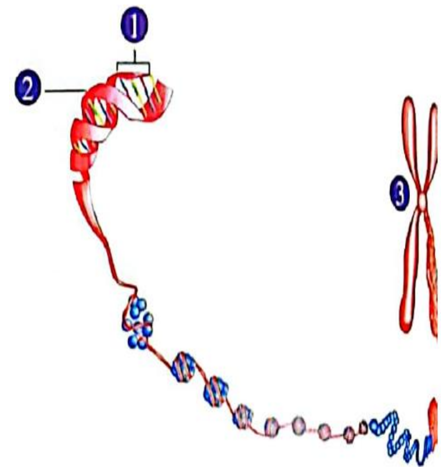
A gland existed in the digestive system of human that has a role in digestion process also it is secretes two hormones with opposite effect due to their functions.

Based on the previous determine each of the following :

1. The name of this gland is ....
2. The name of the first hormone is ....
3. The name of the second hormone is ....

Study the figure in front of you, then complete the following spaces :

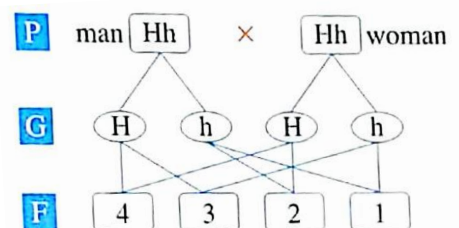
The point number (3) represents .... which its chemically structure from number (2) which is .... and connected with protein, and it carries .... to the individual, while number (1) that represents .... which transmits the hereditary traits from parents to offspring.



....

According to your studding answer the following :

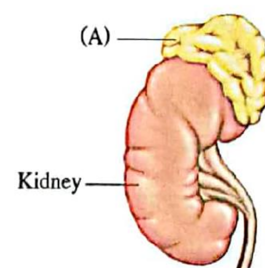
1. The opposite figure represents the inheritance of one of humans traits, what is the number of the child that carries the recessive trait ?



....
....

Look at the opposite figure and answer :

1. What is the name of (A) gland ?
2. Mention the function of the hormone which the (A) gland secretes.



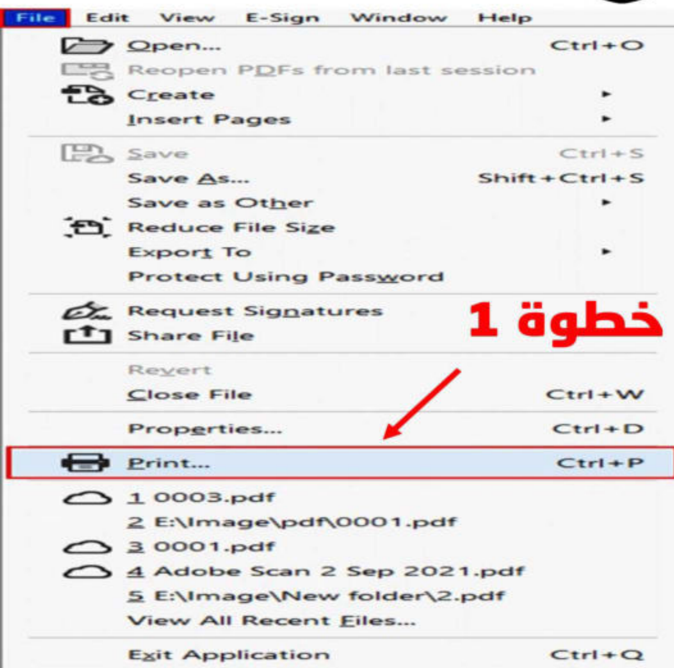
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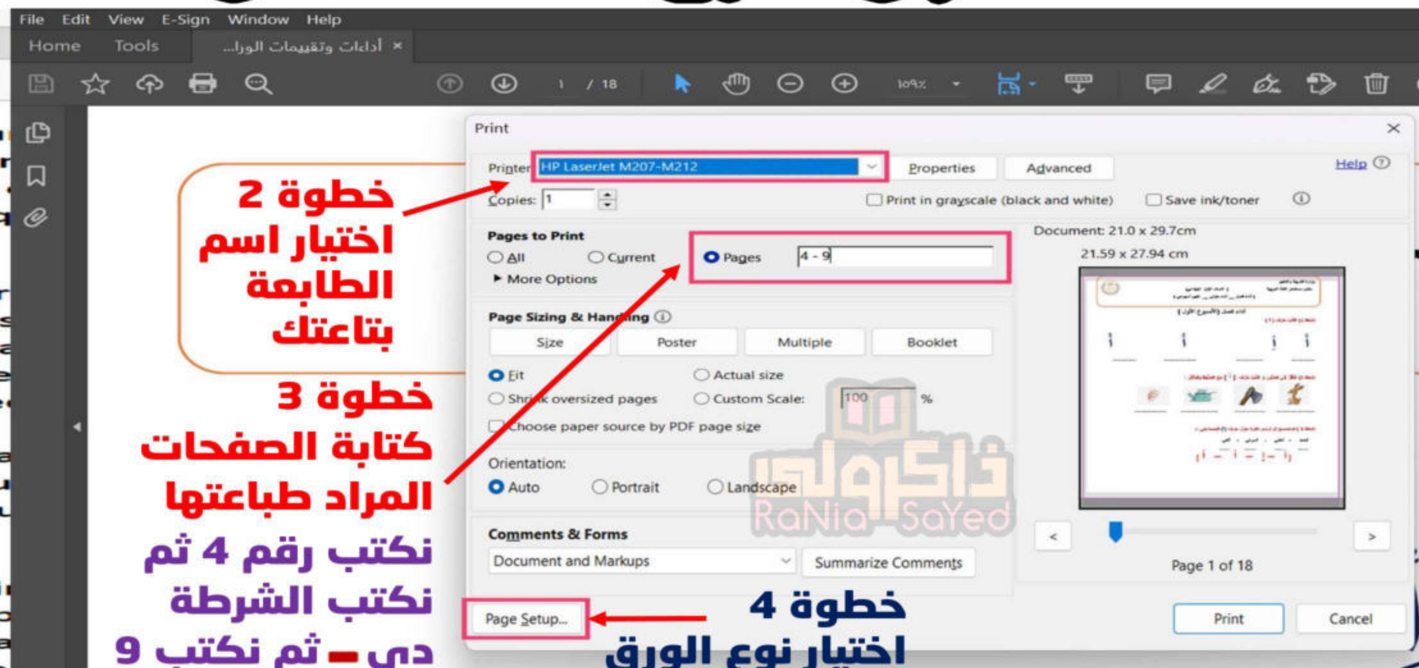
2. Use symbols to express the mating between man with black hair (Bb) with a woman has light colour hair (bb), showing the parents, gametes and first generation.

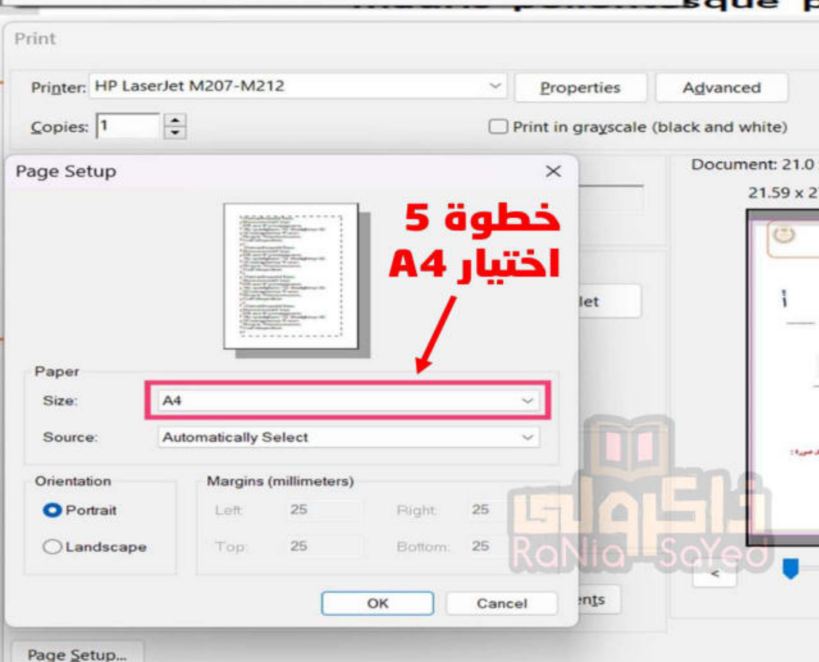
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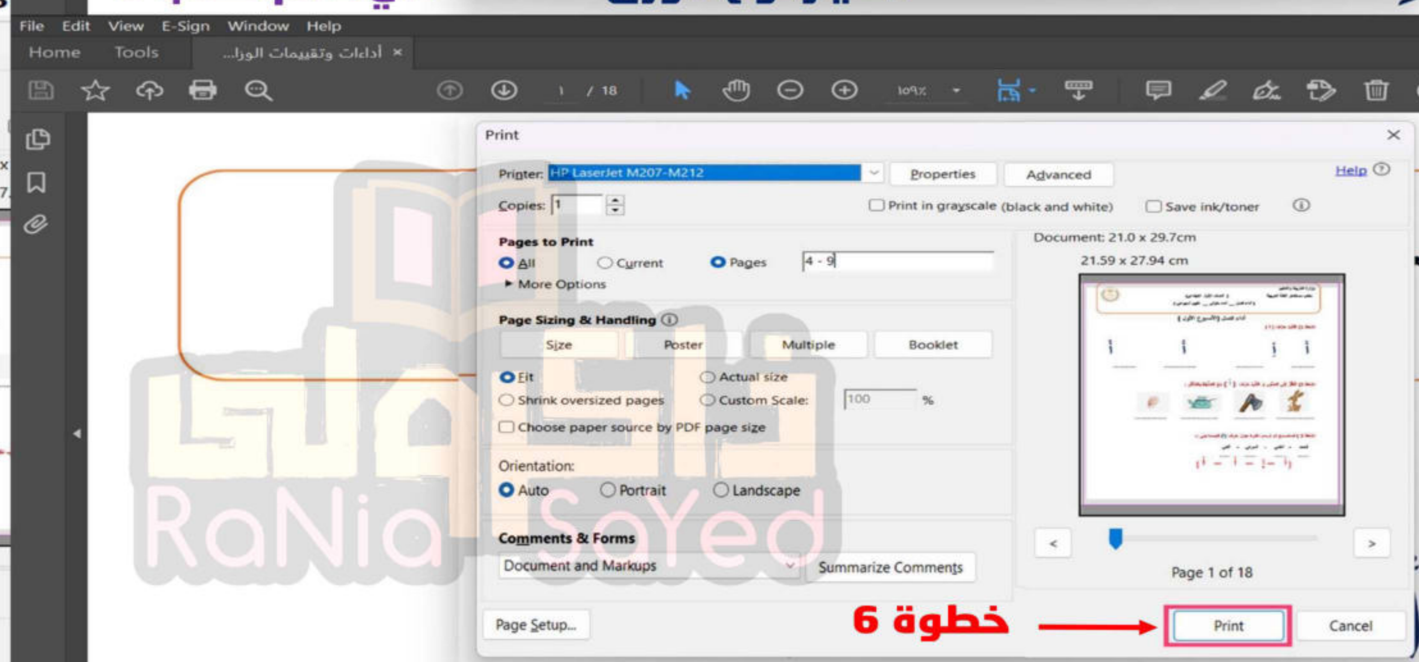
كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9









حمل الآن

مجانا وحصريا

المراجعة رقم (2)

الترم الثانى





Unit one

3rd prep.

Lesson one: Chemical reactions

Question one: complete the following statements:

1) ……….. gas turbid the lime water, while ………….. gas helps in burning.
2) By heating copper hydroxide, its color changes from …………….. into ………….
3) Sodium nitrate decomposes by heat into …………. and ……………, while ………… salt decomposes into copper oxide and sulpher trioxide gas.
4) When sodium reacts with water , ……….. gas evolves , while …………. gas evolves by heating of blue copper sulphate.
5) The changing of the (Mg) into (Mg^{+}) is considered …………… process , while the changing of (O^{-}) into (O) is considered ………….. process.
6) When the hydrogen gas passes on a hot copper oxide , copper oxide changes to be …………. and ………… is formed.
7) The reaction of salt solutions together is considered as ………… reactions , which accompanied with the formation of …………..
8) In the following reaction " $H_2 + CuO \longrightarrow H_2O + Cu$, hydrogen gas is considered as …………… agent while copper oxide is considered as …………. agent.
9) The metals is arranged descendingly according to ………………. in the chemical activity series.
10) $2Na + 2H_2O \rightarrow$ ……. + H_2 + ……….
11) $2Al + 6HCl \rightarrow$ ……….. + …………..
12) Na_2CO_3 + …………. $\rightarrow$ 2NaCl + ……….. + ………...

Question two: What is meant by each of the following?

1) Chemical reaction.
………………………………………………………………………………………
2) Simple substitution reactions.
………………………………………………………………………………………

3) Double substitution reactions.

…………………………………………………………………………………………

4) Oxidation (two definitions)

…………………………………………………………………………………………

…………………………………………………………………………………………

5) Reduction (two definitions)

…………………………………………………………………………………………

…………………………………………………………………………………………

6) Oxidizing agent (two definitions)

………………………………………………………………………………………...

………………………………………………………………………………………...

7) Reducing agent (two definitions).

………………………………………………………………………………………...

………………………………………………………………………………………...

8) Neutralization.

………………………………………………………………………………………..

Question three: Choose the correct answer:

1) ………… metal doesn't replace the hydrogen of the diluted acids.

(Magnesium – silver – zinc – iron)

2) Which of the following substances doesn't produce black product?

(HgO – $Cu(OH)_2$ – $CuSO_4$ – $CuCO_3$)

3) Active metals replace the hydrogen of the water and ………… produce.

(Metal oxide – metal hydroxide – metal carbonate – metal sulphate)

4) In the oxidation reduction reactions , the number of the loosed electrons are ………….. the gained electrons. (More than – less than – equal to)

5) When potassium reacts with diluted hydrochloric acid , hydrogen gas evolves and ………….. salt is formed.

(potassium nitrate – potassium sulphate – potassium chloride – potassium hydroxide)

6) Oxidation and reduction are …………. processes.

(concurrent – separated – no correct answer)

Question four: Give reason "using chemical equations if it is possible":

1- Zinc reacts with the diluted hydrochloric acid while copper doesn't with the same acid.

……………………………………………………………………………………

……………………………………………………………………………………

2- A white precipitate is formed when silver nitrate solution is added to sodium chloride solution.

……………………………………………………………………………………

……………………………………………………………………………………

3- A black substance is formed by the heating of green copper carbonate.

……………………………………………………………………………………

……………………………………………………………………………………

4- An effervescence occurs when sodium carbonate is added to hydrochloric acid.

……………………………………………………………………………………

……………………………………………………………………………………

5- A red ppt. is formed by adding magnesium to the copper sulphate solution.

……………………………………………………………………………………

……………………………………………………………………………………

6- Oxidation doesn’t mean the combination with oxygen only.

……………………………………………………………………………………

……………………………………………………………………………………

7- Metals are considered as reducing agents.

……………………………………………………………………………………

……………………………………………………………………………………

8-Non- metals are considered as oxidizing agents.

……………………………………………………………………………………

……………………………………………………………………………………

9- Double substitution reactions don't contain oxidation and reduction.

……………………………………………………………………………………

……………………………………………………………………………………

10- Mass of sodium nitrate decreases by heating.

……………………………………………………………………………………

……………………………………………………………………………………

Question five: Show by the chemical balanced equations the following:

1- The effect of heat on the red mercuric oxide.

……………………………………………………………………………………

2- Adding of hydrochloric acid to the sodium carbonate.

……………………………………………………………………………………

3- Reduction of the hot copper oxide by passing of the hydrogen on it.

……………………………………………………………………………………

4- Adding of silver nitrate solution to the sodium chloride solution.

……………………………………………………………………………………

5- Passing of hydrogen gas on the hot black copper oxide.

……………………………………………………………………………………..

6- The reaction of salt and acid.

……………………………………………………………………………………

Question six: Put (√) or (×) with correction:

1- The substance that produces from the chemical reaction is the same substance that enter in it ( )

2- Red mercuric oxide decomposes by heat into silver color precipitate in the tube ( )

3-Non metals are arranged descendingly according to their chemical activity series. ( )

4-Neutralization is the reaction of acid and base to form salt only. ( )

5-Hydrogen gas evolves when sodium reacts with water. ( )

6-Copper is more active than magnesium. ( )

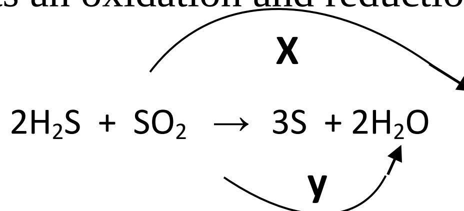
7-Decreasing the percentage of hydrogen in the matter is the result of oxidation process. ( )

8-The reaction between chlorine and sodium includes oxidation and reduction processes. ( )

9- Oxidation and reduction are concurrent processes. ( )

Question seven: The opposite equation represents an oxidation and reduction reactions…complete writing the reason:

- Process (x) represents ………… reaction.
- Process (y) represents ………… reaction.
- What are the oxidizing and reducing agents?



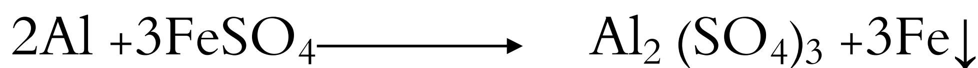
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Question eight: Mention the oxidizing and reducing agents in the following reactions:



$$2Mg + CO_2 \longrightarrow 2MgO + C$$



$$2Al + 3FeSO_4 \longrightarrow Al_2(SO_4)_3 + 3Fe\downarrow$$

……………………………………………………………………………………

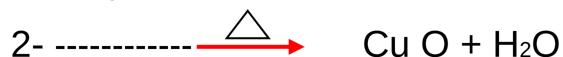
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Question nine: Complete the following chemical reactions:



1- $2HgO \xrightarrow{\triangle} 2$ ------------ + O_2



2- ------------ $\xrightarrow{\triangle}$ $CuO + H_2O$



3- $CuCO_3 \xrightarrow{\triangle}$ ------------ + ------------



4- $2NaNO_3 \xrightarrow{\triangle} 2$ ------------ + O_2



5- -------- + $2H_2O \longrightarrow 2NaOH$ + ------------ + heat



6- Zn + -------- $\longrightarrow ZnCl_2$ + ------------



7- $2Al$ + --------- $\longrightarrow 2AlCl_3$ + ------------



8 - ------ + $CuSO_4 \longrightarrow MgSO_4$ + ------------



9- ---------- + $HCl \longrightarrow NaCl$ + ------------



10- ----------- + $2HCl \longrightarrow 2NaCl$ + ------------ + -----------



11- $NaCl$ + ---------- $\longrightarrow$ ------------ + $AgCl$



12- $2Na$ + ----- $\longrightarrow$ ------------



13- $2Na \longrightarrow$ ------------ + $2e^-$



14- Cl_2 + -------- $\longrightarrow 2Cl^-$

Question

How can you get sodium nitrite from copper hydroxide??

....

....

....

Question

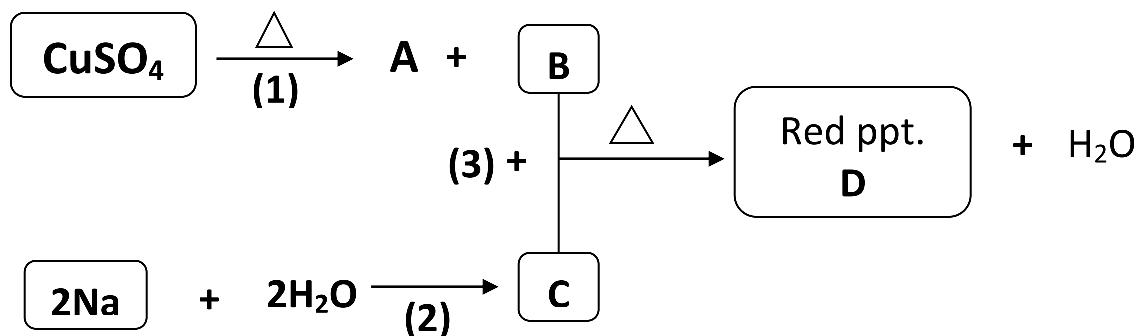
How can you get copper from "copper sulphate" with two different ways?

....

....

....

Complete the following



Write what are these letters (A, B , C , D) indicate ?

....

....

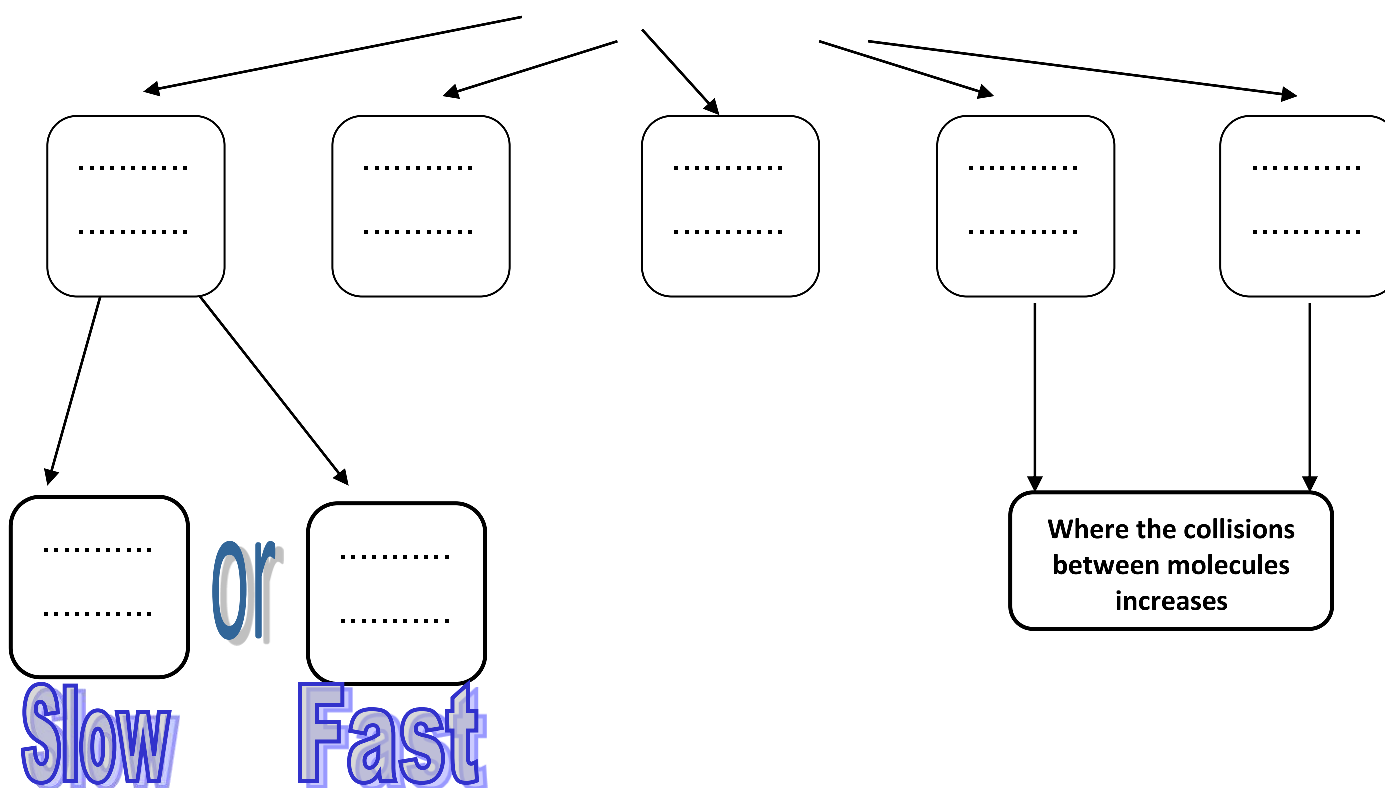
What is the type of the reaction number (1) ?

....

Lesson two: Speed of chemical reactions



Question one: Complete the following diagram:



Question two: Give reasons for :

1) Chemical reactions are different in their speeds.

....

....

2) Reaction of sodium chloride with silver nitrate is fast.

....

3) The reaction hydrochloric acid with iron filings is faster than the reaction with the iron piece.

…………………………………………………………………………………………...

……………………………………………………………………………………………

4) You should chew the food well before swallowing.

……………………………………………………………………………………………

……………………………………………………………………………………………

5) The increase in the concentration of reactants leads to the increase in the speed of the chemical reaction.

……………………………………………………………………………………………

……………………………………………………………………………………………

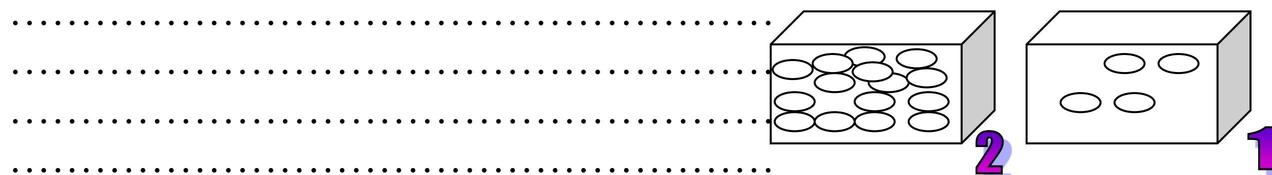
6) The non frozen food spoilt quickly.

……………………………………………………………………………………………

……………………………………………………………………………………………

Question three: In the following figure , answer :

- The two boxes are equal in their volumes.
- Box (1) contains less amount of oxygen than box (2).
- In which box does the aluminum burn quickly? Why?



- Mention other factors affecting the speed of the chemical reactions.

………………………………………………………………………………………………

……………………………………………………………………………………………

Question four: Write shortly about the catalysts.

………………………………………………………………………………………………

………………………………………………………………………………………………

……………………………………………………………………………………

Question five: Write the relation between each of the following as in the example:

The relation between	The relation
The exposed area to the reaction and the speed of the chemical reaction	Direct
The concentration of the reactants and the speed of the chemical reaction	
Temperature and the speed of the chemical reactions	
The reaction of the ionic compounds and the speed of the chemical reaction	

Unit two

Lesson one: Physical properties of the electric current



Question one: Complete the following statements:

1) Electric current can be used in the ……………………… , ……………………….. and …………………………..
2) When the force of the nucleus becomes weak or stopped so ………………… becomes free and flow in the electric conductor.
3) The electric current is ………………………………………………………………………………
4) The physical properties of the electric current are ………………… , ……………… and ……………………
5) Current intensity is ………………………………………………………………………………
6) The electric current can be detected in the circuit by using ……………………….
7) Current intensity = ……………………… ÷ ……………………..
8) Ammeter is connected in ………………… in the circuit.
9) The current intensity that flows in the circuit when the amount of charges is 1 coulomb and the time needed is 1 second is called …………………
10) The electric potential is ………………………………………………………………………
11) The potential difference is ……………………………………………………………………
12) The transfer of electric charges from electric conductor to another depends on the ………………………………….
13) The electric potential difference is measured by the ……………………... apparatus and ……………………… unit.
14) The work done to transfer electric charges is measured by …......... unit.
15) Coulomb is ………………………………………………………………………………………
16) Voltmeter is used to measure ……………………………. and ………………………..
17) Voltmeter is connected in ………………… in the circuit.
18) The potential difference between the two poles of the battery when the circuit is opened is called ………………………….
19) Volt is ……………………………………………………………………………………………

20) Ammeter is symbolized with ………….. in the circuit , while voltmeter is symbolized with …………………
21) The opposition that the current faces during its motion in the wires is called ……………………………………
22) The measuring unit of the electric resistance is ………………………..
23) Ohm is ………………………………………………………………………………………………..
24) The two types of the electric resistance are ………………… and …………………..
25) The constant resistance is symbolized by ……………………… in the circuit.
26) The rheostat is consists of …………………… , ………………… , …………………..
and ………………………..
27) The idea of operation of the electric rheostat depends on
………………………………………………………………………….
28) The relation between the current intensity and potential difference is
……………………. , while the relation between current intensity and
resistance is ………………………..
29) The value of the current intensity can be changed (controlled) by using
……………………… apparatus.
30) The function of the electric resistance is ……………………………………………….
31) Ohm's law states that ………………………………………………………………………
and its mathematical relation is …………………………………
32) The ratio between the potential difference and the current intensity is
called …………………………….
33) The electric resistance value is changed in the circuit when the
…………………… is changed.

Question two: Give reasons for:

1) The value of the current intensity increases if the time needed to transfer the charges decreases.
…….
2) Some electrons become free when a conductor is connected with another.
…….
3) Ammeter is connected in series in the electric circuit.
…….
4) The value of the current intensity increases as the resistance decreases.
…….

5) There are different types of the electric resistance.

……

6) The importance of Ohm's circuit.

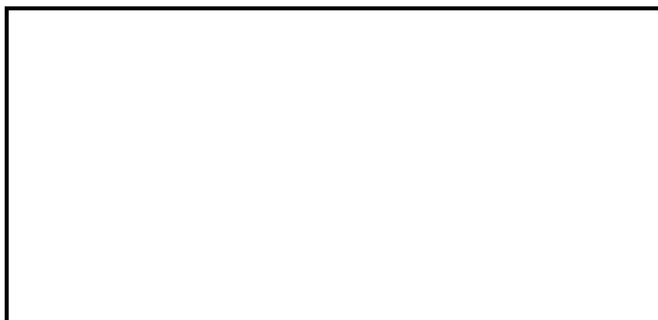
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Question three: show by drawing each of the following:

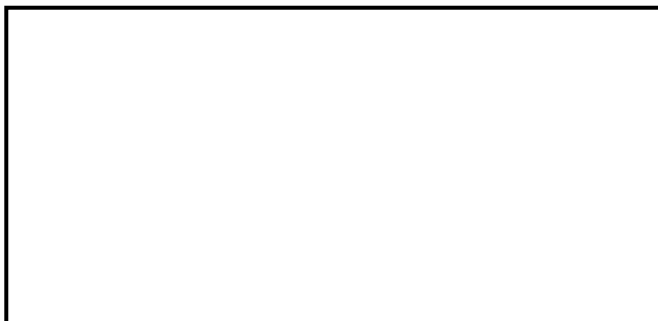
1) Ammeter in the electric circuit.



2) Voltmeter in the electric circuit.



3) An electric circuit which gets the relation between the current intensity and the potential difference (Ohm's circuit).



Question four: Write the mathematical relations for:

1- Measuring the potential difference. ……………………………………

2- Measuring the current intensity. ……………………………………

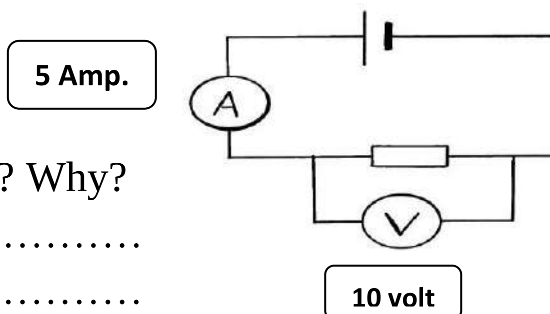
3- Measuring the amount of electricity (two relations) :

……………………………………

……………………………………

4- Electric resistance. ……………………………………

Question five: variant problems:



1- Look to the opposite figure then answer:

- Dose the circuit verify Ohm's law practically? Why?

………………………………………………………

………………………………………………………

- Calculate the value of the resistance .what is its type ?

……………………………………………………………………………

2- Calculate the amount of electricity that flow in a conductor if its resistance is 2200 Ohm for 2 minutes when it is connected to potential source = 220 V.

……………………………………………………………………………..

3- Calculate the amount of the work done to transfer an amount of electricity of 400 coulomb between two terminals of potential difference of 4.5 V.

……………………………………………………………………………...

4- Calculate the amount of electric current that resulted due to the flow of electricity of 5400 coulomb in 5 minutes.

……………………………………………………………………………...

5- Calculate the amount of work done to transfer an amount of electricity of 20 coulomb between two terminals of potential difference of 10 V.

……………………………………………………………………………...

6- If an electric current of 20 Ampere has flown in the electric heater and the p.d was 220 , determine the electric resistance of the heater.

……………………………………………………………………………...

7- An electric appliance works with a potential difference 220 volts and electric resistance 20 Ohm. Calculate the current intensity and the amount of electric charges through 5 seconds.

8- Calculate the amount of charges that flow through a wire if the electric intensity equals 6 amperes through 3 seconds.

9- If an electric heater connected to a source of electric current its intensity =2 ampere. Calculate the amount of charges that flow through a wire in 4.2 sec.

10- Calculate the work done by a battery its e.m.f = 12 volts to transfer an electric charge of 2.5 coulomb in an electric circuit.

11- Calculate the work done to transfer electric charge is 50 coulomb if the p.d between two terminals of the wire = 12 volts.

13- Calculate the time of transferring of electric charges = 60 coulombs in an electric circuit if the current intensity = 0.25 amperes.

14- Calculate the time of transferring of electric charges = 10 coulombs in an electric circuit if the current intensity = 5 amperes.

15- Calculate the current intensity that flow through a wire if the electric charge equals 20 coulombs in a time 4 seconds.

16- Calculate the current intensity that flow through a wire if the electric charge equals 180 coulombs through 2 minutes.

17- If the p.d between the two poles of a phone = 24 volts, what is the electric resistance of the phone wires if the current intensity is 0.03 ampere.

18- Calculate the p.d between two terminals of the wire when the work done to transfer electric charge is 8 coulomb = 32 joules.

Question six: write the scientific term for each of the following:

1- The flow of electric charges in an electric wire. (……………………….)
2- The amount of electricity in coulomb that flow in an electric wire in a unit time. (……………………….)
3- The measuring units of the electric charges. (……………………….)
4- The apparatus that uses to determine the E.M.F (……………………….)
5- The electric current that is resulted from the passing of electric charges of 1 coulomb in unit time. (……………………….)
6- The apparatus that is connected in series to measure the current intensity. (……………………….)
7- The state of the conductor that show the transfer of electricity from and to it. (……………………….)
8- The charge that is transfer with an intensity of 1 Ampere in one second. (……………………….)
9- The potential difference between two terminals of a conductor when a work done to transfer charge of 1 coulomb is 1 joule. (……………………….)
10- The opposition that the current faces during its motion in the electric conductor. (……………………….)
11- The measuring unit of the electric resistance. (……………………….)
12- The resistance which is symbolized —WWW—). (……………………….)
13- An electric circuit that is used to get the relation between the electric current and potential difference . (……………………….)
14- The ratio between the electric current and the potential difference. (……………………….)
15- The resistance of a conductor in which the electric current is 1 Ampere and the potential difference is 1 volt. (……………………….)

3rd prep.

Question seven: Define each of the following :

1) Electric current.

…………………………………………………………………………………………...

2) Current intensity.

…………………………………………………………………………………………...

3) Ampere. (two definitions).

…………………………………………………………………………………………...

…………………………………………………………………………………………...

4) Coulomb.(two definitions)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

5) Electric potential.

…………………………………………………………………………………………...

6) Potential difference.

…………………………………………………………………………………………...

7) The volt. (Two definitions).

…………………………………………………………………………………………...

…………………………………………………………………………………………...

8) Joule.

…………………………………………………………………………………………...

9) E.M.F

…………………………………………………………………………………………...

10) Electric resistance.

…………………………………………………………………………………………...

11) Ohm.

………………………………………………………………………………………..

Question eight: What is meant by?

1) The current intensity passes in the conductor 1.5 ampere.

……………………………………………………………………………………...

2) The potential difference between two terminals of a conductor is 5 volts.

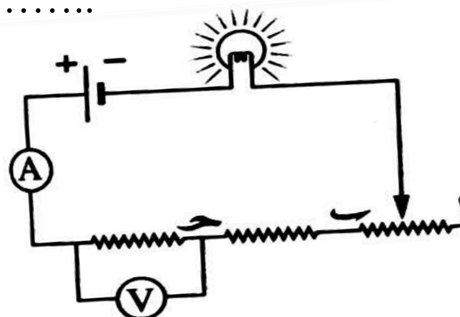
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3) A resistance of a conductor = 5 Ohms.

……………………………………………………………………………………...

Question nine:

1- From the opposite figure, illustrate at which point you get ?
- The strongest lightning of the bulb. ………………
- The smallest reading of the ammeter. ……………..
- The largest reading of the circuit. ……………..



Lesson two: Electric current and cells

Question one: put (√) or (×) and correct the wrong one:

1) Chemical energy can be changed into electric energy through the electric generators. ( )

2) The electric current that resulted from the electrochemical cells is known as alternating current. ( )

3) In dynamo, the mechanical energy is converted into electric energy. ( )

4) From the advantages of the A.C is its ability to be converted into D.C

5) A.C is resulted from waterfalls. ( )

6) Electrons flow in the D.C in two different directions. ( )

7) D.C is used in the lightning of the streets and electroplating. ( )

8) The electric cells are connected in the circuit is series only. ( )

9) The E.M.F of a battery increases when the cells are connected in parallel.

( )

10) The negative pole is connected with another negative in the battery. ( )

11) The E.M.F of a battery which their cells are connected in series is calculated from the relation (e.m.f of one cell × N). ( )

Question two: Compare in table between each of the following " use diagrams if it is needed" :

1- Alternating and direct currents.

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………

2- Connecting the cells in series and in parallel.

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

……………………………………………………………………………

3- The resulted (E.M.F) from the connection in series and in parallel.

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

……………………………………………………………………………

Question three: Give reason for each of the following:

1- Alternating current is preferable in using than direct current.

………………………………………………………………………………………

………………………………………………………………………………………

2- The reading of the voltmeter is changed if 4 cells are connected in series than in parallel.

………………………………………………………………………………………

………………………………………………………………………………………

Question three: Show by drawing only:

1) The connection of 3 cells each of 1.5 volts to get an e.m.f with :

a. 1.5 volt b. 3 volt c. 4.5 volt

2) The connection of 4 similar cells , each of 1.5 volt to get an e.m.f :

a. 6 volt

b. 4.5 volt

c. 3 volt (two methods)

d. 1.5 volt

3) The connection of 5 similar cells of e.m.f for each is 3 volt to get :

a. 9 volt

b. 15 volt

c. 3 volt

-If the e.m.f for 5 similar electric cells connected in parallel = 3 volts , what is the e.m.f for one cell?

Lesson three: Radioactivity and nuclear energy

Question one: Choose the correct answer:

1- Mass of the nucleus is concentrated in the ………………

(energy levels – nucleus – electrons)

2- The source which the atom gets its tremendous energy is known as ………

(Nuclear energy – electric energy – heat energy)

3- There is …………… force between the components of the nucleus.

(repulsion – attraction – both are correct)

4- The French scientist ………….. is considered the discover of the radioactive phenomenon.

(Mendel – Ohm – Bequruel)

5- The radiation that comes out from the Uranium element is ……………. and has the ability to penetrate solids.

(visible – unseen – No correct answer)

6- ………………….. come (s) out from the radioactive element.

(rays only – particles only – both are correct)

7- The natural radioactivity is done by …………………

(Controlling the nuclear energy – No ability to control the nuclear energy – both are correct)

8- There are several theories for ……………… in the fields of atomic bomb.

(Dr.Ali Mostafa Mosharafa – Ohm – Mendel)

9- The natural sources of the radioactive pollution is represented by …………

(Cosmic radiation – nuclear reactors – no correct answer)

10- Chernobyl accident produces the isotopes of …………. radioactive element.

(Uranium – cesium – polonium)

11- Bone marrow can be destroyed as a result of exposure to ………… amount of radiation for ………… periods.

(large and short – long and small – both are correct)

12- Physical effects take place as a result of the exposure to ……….. amount of radiation.

(Large – small – both are correct)

13- The exposure to the small amount of radiation resulted in a cellular effects as ……………

(Spleen damaging – changing in the sex chromosomes – changing in the hemoglobin structure)

15- The area chosen for the storing of the radioactive wastes should be ………

(Unstable – away from the volcanoes – both are correct)

16- The medium radioactive wastes are disposed in the earth after ………….

(Surrounding them with a layer of the cement only – surrounding them with rocks only – both are correct)

17- …………… is from the radioactive elements.

(Iodine – zirconium – sodium)

Question two: complete the following:

1 The nuclear energy arises from

....
....
....
....

....
....
....

....
....
....
....

2

1) The scientist who discovered the radioactivity is ………… ....

2) Types of the radioactivity are ....

3) From the type of the radioactive pollutions are

4) Radioactivity is ………………………

....

Resulted from Resulted from

....

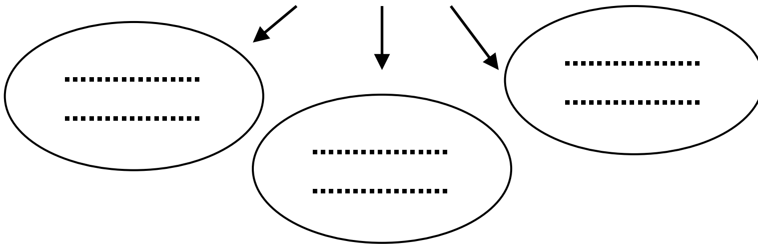
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The radiation affects the human body due to the exposure to:

.... amount of radiation

.... amount of radiation
And that causes:
....
....



And that causes

Question three: Give reasons for:

1) The nucleus is considered as the energy store.
....
....

2) Radium element is considered a radioactive element.
....
....

3) There are two types of radiation.
....
....

4) Einstein described Dr. Ali Mostafa Mosharafa as the greatest atomic scientist in the world.
....
....

5) There are two sources of the radioactive pollutions.
....
....

6) The reaching of the Chernobyl radioactive wastes to the food.

…………………………………………………………………………………………

……………………………………………………………………………………

7) The harmful effects of the radiation on the human body.

………………………………………………………………………………………

………………………………………………………………………………………

8) Radioactive wastes should be disposed away from the underground water.

………………………………………………………………………………………

………………………………………………………………………………………

3rd prep.

Unit three

Lesson one: Principles of heredity

Question one: justify:

1) There are two types of the traits.

……………………………………………………………………………………

……………………………………………………………………………………

2) Mendel has chosen pea plant to conduct his experiments.

……………………………………………………………………………………

……………………………………………………………………………………

3) Stamen has removed from the pea flowers during the experiment.

……………………………………………………………………………………

4) Mendel has covered the pistils of the pea flowers during the experiment.

……………………………………………………………………………………

5) Individuals may be hybrid or pure.

……………………………………………………………………………………

……………………………………………………………………………………

6) The two genetic factors are separated during the formation of the first generation's gametes.

……………………………………………………………………………………

7) When a pea plant with red flowers has pollinated with another one with white flowers, all the produced generation will be with a red flowers.

……………………………………………………………………………………

8) The absence of freckles considered as a dominant traits in the human.

……………………………………………………………………………………

3rd prep.

Question two: complete the following:

1) There are two types of the traits in the livings ……………. and ………….
2) The scientist …………. has conducted the main principles of heredity.

3) The pea plant is ………….. , so it could be self pollinated .

4) The life cycle of the pea plant is ……………

5) Pea plant can be pollinated …………….. or ………………

6) In the pea plant there are contrasting traits as ……….. and ………flower's color , ………….. and …………… pod's color , ………….. and ……….. seed's color.

7) The …………… trait appears in the first generation only, while the …………….. appears in the second with a percentage 25 %.

8) The ….… color of the pea plant's flower dominates the ………… flower color.

9) The genetic factors is ………… that transmitted from one generation to another through …………….

10) Gametes are formed in the 1st generation by …………. division.

11) Genetic traits are transmitted through …………..

12) The genetic factors of one trait are segregated during the formation of ………………

13) The symbols of the dominant trait is ………. , while the recessive one is ……………

14) The symbol (yy) represents the ………. trait.

15) The symbol (YY) represents the ………. trait.

16) The law of segregation states that ……………………………………………………………………………

……………………………………………………………………………

17) The dominant traits are inherited to the recessive one in the ratio ………. **:** ………

18) The second law of Mendel states that
……………………………………………………………………………………
……………………………………………………………………………………

19) From the dominant traits in the human body are …..…..… and …………
,while from the recessive traits are …………. and …………….

20) The ………….. science explains the transmission of heredity traits from ……………….. to offspring.

21) Mendel has chosen ………… principle traits of the pea plant to conduct his experiment.

22) Mendel's first law is called …………………. , while the second is called …………………….

Question three: answer the following:

1- Use the following symbols to conduct the results of the mating between the pea plant with flowers red color (RR) and another one with white flower colors (rr).

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

2- Show the resulted generation of the mating of two individuals hybrid (Rr) in which both are from the tall stemmed pea plant.

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

3- A mating between hybrid pea plants with red flowers (Rr) and another one with white flowers (rr) has occurred. Illustrate using heredity principles the traits of the resulted generation.

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

Lesson one: Hormones in the human body

Question one: Define each of the following:

1) Hormones.

…………………………………………………………………………………

2) Endocrine glands.

…………………………………………………………………………………

3) Dwarfism.

…………………………………………………………………………………

Question two: compare in a table between each of the following:

1) Simple goiter and exophthalmoses.

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

2) Dwarfism and gigantism.

…………………………………………………………………………………

…………………………………………………………………………………

3) Insulin and glucagon.

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

4) Duct and endocrine glands.

…………………………………………………………………………………

…………………………………………………………………………………

Question three: Give reason for:

1) Endocrine glands are called ductless.

…………………………………………………………………………………………

…………………………………………………………………………………………

2) Pituitary gland is called "the master gland".

…………………………………………………………………………………………

…………………………………………………………………………………………

3) Pituitary gland controls the height which the body will reach.

…………………………………………………………………………………………

…………………………………………………………………………………………

4) The importance of the thyroid gland.

…………………………………………………………………………………………

…………………………………………………………………………………………

5) Pancreas is a double function gland.

…………………………………………………………………………………………

…………………………………………………………………………………………

6) Hormones work as the thermostat in the electric appliances.

…………………………………………………………………………………………

…………………………………………………………………………………………

7) Human is infected with diabetes disease.

…………………………………………………………………………………………

…………………………………………………………………………………………

Question four: Choose the correct answer:

1) Hormones are secreted from special organs called ……….

(Duct glands – ductless gland – both are correct)

2) The gland that locates under the brain is called …………

(Thyroid – adrenal – pituitary)

3) ………… is considered the only way for the hormone to reach its site of work.

(Skin – blood – nerve)

4) The hormone that activates the mammary glands to secrete milk after delivery of the baby is secreted from the …………. gland.

(Pituitary – thyroid – reproductive)

5) Calcitonin hormone is secreted from ………… gland.

(Thyroid – pancreas – testes)

6) ………… is a double function gland.

(Thyroid – pancreas – tests)

7) The …………. hormone is secreted from the ovaries.

(Estrogen – testosterone – insulin)

8) Adrenaline is a hormone that is secreted in the case of ……………

(Increase of the sugar percentage – emergencies – growth)

9) Glucagon affects on the ………….. in which the rate of the changing of the glucose sugar increases.

(Spleen – liver – blood)

حمل الآن

مجانا وحصريا

المراجعة رقم (3)

الترم الثانى





2^{nd} Term Science revision for prep3

Sheet (1)

[1] Choose:

1. When we heat metal oxide, we get ………………

- Mercuric oxide & water **- Mercuric oxide & oxygen**

- Mercury & hydrogen **- Mercury & oxygen**

2. When copper hydroxide is heated, we obtain …………………

- Copper carbonate & water **- Copper oxide & water**

- Copper oxide & hydrogen **- Copper & hydrogen**

3. When calcium carbonate is heated ……………… are obtained.

- Calcium bicarbonate & carbon dioxide - Calcium hydroxide & carbon dioxide

- Calcium oxide & carbon monoxide - Calcium oxide & carbon dioxide

4. Most metal sulphates decompose when heated to metal oxide and ……………… gas.



5. On heating copper sulphate, a ……………. Precipitate is formed.

Black – green – blue – reddish brown

6. Some metal nitrates are decomposed by heat into …………..

Metal nitrite &oxygen gas **Metal nitrate & oxygen gas**

Nitrogen oxide & oxygen gas **No correct answer**

[2] Write the scientific term:

1. The breaking up of molecules of reactants and forming of new coherences in the molecules of the products{…………………….}

2. Chemical reactions in which the compound is broken up into simpler one by the effect of heat. {……………………}

[3] Put (√) or (X), then correct:

1. Most metal carbonates decomposed by heating into metal oxide and CO_2. ( )

[4] Complete:

1. Chemical reaction is a process involves ……………. In the reactants molecules and formation of …………. in the product molecules.

2. During ……………. Reactions, the compound is broken up by heat into its simpler components.

3. Copper hydroxide is decomposed by heat into ……………. and …………………..

4. Most metal carbonates undergoes thermal decomposition into ………………… and ………………..

5. $2HgO \longrightarrow$ ………………. + …………………

6. $Cu(OH)_2 \longrightarrow$ ………………. + ………………..

7. $CuCO_3 \longrightarrow$ ………………..+……………………….

8. $2NaNO_3 \longrightarrow$ ……………….. + ……………………….

[5] Give reason for;

1. A black substance is formed on heating copper carbonate.

[7] What happens when:

1. Heating of red mercuric oxide.

2. Heating of blue copper sulphate.

Sheet (2)

[1] Choose:

1. Some metal can replace another one in the solution of these metals which ……………….

a. Follow it in chemical activity series b. Below it in chemical activity series

c. A&B are correct **d. No correct answer**

2. Active metals react with water as they substitute hydrogen of water which rises and produce ………………..

Metal oxide – metal nitrate – metal hydroxide – metal nitrite

3. Zinc react with dilute hydrochloric acid and ……………. Salt is formed.

Zinc chloride – zinc sulphate – zinc nitrate – no correct answer

4. On heating copper turning to dilute hydrochloric acid, …………….. is produced.

Copper hydroxide – copper carbonate – copper chloride – no correct answer

5. Potassium reacts with dilute hydrochloric acid forming ………………. Salt.

Potassium nitrate – potassium sulphate – potassium chloride – no correct answer

6. The reaction between acid and alkali gives ………………

Water &salt – salt &hydrogen – salt &oxygen

7. When potassium hydroxide reacts with dilute hydrochloric acid ……………… are produced.

Potassium chloride &water – potassium sulphate &water -potassium oxide &water – all of the previous choices

8. Clear lime water turbid on passing ……………… gas through it.

Nitrogen dioxide – sulphur dioxide – carbon dioxide

9. On heating silver nitrate solution to sodium chloride solution, a ……………… Precipitate.

Blue – reddish brown – white – red

[2] Put (√) or (X), then correct:

1. The arrangement of metals in a descending order according to the rate of their chemical activity is called periodic table.(   )

[3] Write the scientific term:

1. The arrangement of metallic elements in a descending order according to the rate of their chemical activity.{…………………………………………}

2. A reaction where an element substitute another one in its salt solution. {………………………………………}

3. Chemical reactions in which a change happens between the two radicals (ions) of the two compounds to form another two compounds. {…………………………………}

4. A reactions which involve double exchange between the ions of two compounds to form another two compounds.{…………………………………..}

5. The reaction of acid and alkali to give salt and water.{…………………………………}

[4] Complete:

1. The arrangement of metals in a descending order according to their chemical activity is called ………………….

2. Sodium reacts with water giving ……………… and ……………… gas evolves.

3. ……………… process is the reaction between an acid and an alkali to produce a salt and water.

4. On adding silver nitrate solution to sodium chloride solution, a ……………. precipitate of ……………. Is formed.

5. $2Na + 2H_2O \longrightarrow$ ………………. + ……………………

6. $Zn + 2HCl \longrightarrow$ ………………….. + ……………………

7. $2Al +$ ………… $\longrightarrow 2AlCl_3 +$ …………………

8. $Mg + 2HCl \longrightarrow$ ……………. + ………………

9. ……………. + ……………. $\longrightarrow NaCl + H_2O$

10. $NaCl + AgNO_3 \longrightarrow$ …………….. + ………….

[5] Give Reason for:

1. Copper doesn't react with dil. Hydrochloric acid.

2. Gold doesn't react with dilute acids.

3. The reaction between aluminum and dil. Hydrochloric acid takes a short time to start.

4. Magnesium substitutes copper in copper sulphate solution, while the opposite can't happened.

5. A reddish brown precipitate is formed when magnesium is added to copper sulphate solution.

6. The occurrence of effervescence on putting a piece of aluminum in dil. Hydrochloric acid.

substitution reaction.

Sheet (3).

[1] Choose:

1. In the reaction :

$H_2 + CuO \longrightarrow Cu + H_2O$, the oxidizing factor is ………

H_2 – CuO – Cu – H_2O

2. The oxidizing agent is the substance which …………….. during a chemical reaction.

Gives oxygen – removes hydrogen – loses hydrogen

3. The oxidation agent is the substance that ……………….

Gives oxygen – removes oxygen – gives hydrogen

4. Oxidation is a chemical process involves an increase in the percentage of …………….. gas.

Helium – hydrogen – oxygen – fluorine

5. In the reaction :

$2Na + Cl_2 \longrightarrow 2NaCl$we can say that sodium (11Na) is a reducing factor because it ………………

Units with oxygen – loses one electron – gains one electron – gains hydrogen

6. When sodium atom loses an electron from its outermost energy level, it becomes

Oxidized – reducing agent – reduced

[2] Put (√) or (X), then correct;

1. Reduction is a chemical process where the atom loses electron(s). ( )

2. Chloride ion is a negative ion as it loses an electron.( )

3. Sodium ion is positive ion (Na^+) as it accepts an electron.( )

4. Oxidation and reduction reaction take place separately.( )

[3] Write the scientific term:

1. A chemical process in which an atom of element gains one electron or more. {………………………………………}

2. A chemical process which causes the increase of the oxygen percentage or decrease in the hydrogen content.{…………………………………………}

3. The substance which gives oxygen or takes hydrogen during a chemical reaction.
{………………………………………….}

4. The substance which takes oxygen or gives hydrogen during a chemical reaction.
{……………………………………….}

5. A substance which loses an electron or more during chemical reaction.
{……………………………………….}

[4] Complete:

1. On passing hydrogen gas over hot copper oxide, copper oxide is converted into ………………….

2. …………… agent is the substance which takes oxygen or gives ………………… during a chemical reaction.

3. Oxidation is a chemical process where the atom ………… an electron or more.

4. …………………. Agent is the substance which gains one electron or more during a chemical reaction.

5. Oxidation and reduction are two ……………… Processes.

[5] Give reason for:

1. In the reaction :

$2Na + Cl_2 \longrightarrow 2NaCl$Sodium is considered as a reducing agent, while chlorine is considered as an oxidizing agent.

[8] What happens if: Passing hydrogen gas over hot copper oxide.

[10] In the following reaction :

Copper oxide black + Hydrogen $\longrightarrow$ Copper + H2O

1. What happens to black copper oxide ?

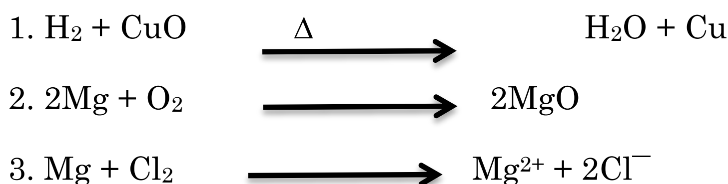
2. What happens to hydrogen gas ?

3. Write the chemical equation which express the chemical reaction .

4. Why does black copper oxide act as an oxidizing agent and hydrogen gas act as a reducing agent ?

[11] In the following reactions:

Determine the oxidizing agent and the reducing agent and mention why ?



1. $H_2 + CuO \xrightarrow{\Delta} H_2O + Cu$

2. $2Mg + O_2 \longrightarrow 2MgO$

3. $Mg + Cl_2 \longrightarrow Mg^{2+} + 2Cl^{-}$

Sheet (4)

[1] Choose:

1. At the beginning of the reaction, the percentage of reactants concentrations equals …………………….   **100% - 0% - 50%**

2. The speed of the reaction of oil with caustic soda is …………

Faster – relatively fast – slower – relatively slow

3, Factors that affect the speed of reaction are ………..

Temperature of reaction – concentration of reactants – nature of reactants – all of the previous answers

4. Iron filings react with dilute hydrochloric acid faster than a piece of iron has the same mass due to the ……………….

Increase in concentration – presence of catalyst – increase in surface area – no correct answer

[2] Put (√) or (X), then correct;

1. The reactions of ionic compounds are slower than that of coordinate compound.(   )

[3] Write the scientific term:

1. The change in the concentration of reactants and resultants in a time unit.

{……………………………..}

[4] Complete:

1. Nitrogen pentoxide break up into ……………. And …………. Gas.

2. At the beginning of the reaction, the concentration of reactants is ………….. %.

3. The change in the concentration of reactants and resultants in a time unit is ………………………

4. The rate of chemical reaction depends on ………………,…………………..,……………………… And ………

5. The reaction of contributing compounds is ………………..

6. Sodium chloride powder reacts ……………. Than a cube of sodium chloride.

[5] Give reason for:

1. Reactions between ionic compounds are fast whereas, reactions between organic compounds are slow.

2. A certain mass of iron filings reacts with acids faster than the reaction of a block of iron mass with acids.

3. Using nickel filings in hydrating oil instead of pieces of nickel.

Sheet (5)

[1] Choose:

1.The rate of chemical reaction increased by rising temperature due to the ……………………..

- Increase in the number of collisions between reactants

- Presence of covalent or ionic bonds - Increase in the surface area

2. The substance which change the rate of the reaction without itself being changed is known as …………………

Oxidizing agent – active agent – catalyst – reducing agent

3. Catalyst increase the rate of chemical reaction because it …

- Decreases the energy needed to start the reaction

- Combines with reactants then separates away to give the product.

- Doesn't chemically change

[2] Put (√) or (X), then correct:

1. The increase in the concentration of the reactants increases the number of collisions between molecules so that, the speed of reaction decreases. (   )

2. Rate of chemical reaction is increased by decreasing temperature. (   )

[3] Write the scientific term:

1. A substance which increases the speed of the chemical reaction without interfering in it or being consumed.{…………………………………………}

[4] Give reason for:

1. The speed of chemical reaction increases when the amount (concentration) of the reactants increases.

2. The rate (speed) of chemical reaction increases by heating.

3. The fridge is used to preserve food.

4. Catalyst is used in some chemical reactions.

[9] Mention the function of;

1. Refrigerator……………………………………………………………………………….

2. Catalyst in chemical reaction……………………………………………………………

3. Enzymes in the human body……………………………………………………………..

Sheet (6)

[1] Choose:

1. The ……………. Is the measuring unit of the electric charges.

Coulomb – Ampere – Volt

2. The measuring unit of the electric current intensity is ………

Ampere – volt – ohm – coulomb

3. The ammeter is used to measure ………….. in the electric current.

Potential difference – current intensity – resistance – e.m.f.

[2] Put (√) or (X), then correct:

1. The ampere is the charge transferred by a constant current of one ampere in one second. (   )

2. The measuring unit of electric current resistance is coulomb.(   )

3. The ammeter measures the potential difference between the two ends of a conductor.

4. In the electric circuit, the ammeter is connected in parallel.(   )

[3] Write the scientific term:

1. The flow of electric negative charges in a conducting material (metal wire) {…………………………..}

2. The electric current intensity passing through a circuit when a charge of one coulomb passes through a given cross section in one second. {…………………………}

3. The current intensity produced by flowing one coulomb of electric charges in one second through a conductor.{……………………………….}

4. The quantity of electric charges that flow through a conductor in a unit time. {…………………………..}

5. A device used to measure the electric current intensity.{…………………………..}

[4] Complete:

1. The current intensity due to the flow of 2700 coulomb in 300 second through a cross section of a conductor equals ……………

2. The ……………….. apparatus is used to measure the current intensity in units.

[7] Problems:

1. Calculate the electric current intensity that flows through cross section of a wire if a charge of 10 coulomb passes through 2 seconds.

2. Calculate the current intensity due to the flow of 5400 coulomb in 5 min. through a cross section of a conductor.

3. Calculate the quantity of electricity that flows in a wire if the current intensity passes through it is 18 amperes in a time of 7 minutes

Sheet (7).

[1] Choose:

1. For measuring the potential difference between two terminals of a conductor, we use ………….. apparatus.

Pyrometer – barometer – voltmeter – ammeter

2. The …………….. is used to measure the e.m.f. of a battery.

Voltmeter – ammeter -rheostat – ammeter

3. The unit that is used in measuring the electric resistance is …………………..

Ohm – ampere – volt – coulomb

4. The ………… Is used to measure the electric resistance.

Ammeter – voltmeter – ohmmeter – rheostat

5. The sliding rheostat is used to control ……………. And …………… in the electric circuit.

- Current intensity & potential difference - Resistance & potential difference

- Current intensity & resistance

6. The value of resistance of an electric conductor in an electric circuit is changed on changing ………………….

- Dimension of a conductor - Electric current intensity passing through it

- Potential difference between its terminals - Other electric circuit components

7. ……………. Is the mathematical relation OF Ohm's law.

R=V/I – I=RV – R=VI – V=R/I

[2] Put (√) or (X), then correct:

1. The voltmeter is used to measure the electric resistance.(   )

2. The electric current intensity passing through a conductor is inversely proportional to the potential difference between its ends at constant temperature. (   )

3. The resistance of a conductor that one ampere is passed through it when the potential difference between its terminals is 1 volt equals 10 ohm. (   )

4. If the potential difference between the two ends of a conductor is 3 volt, and an electric current intensity of one ampere passes through it, the resistance of a conductor is one ohm. (   )

[3] Write the scientific term:

1. The electric state of a conductor that show the transference of electricity from and to it. {…………………………………}

2. The value of the work done to transfer a unit of electric charge between two ends of a conductor.{……………………….}

3. The potential difference across two poles of the battery when the circuit is open. {……………………………..}

4. The measuring unit of electromotive force of the electric cell. {………………………}

5. The opposition of the electric current during its flow in the conductor. {…………………………}

6. The resistance of a conductor that allows the passing of an electric current of 1 Ampere through it when the potential difference across its ends is 1 volt. {…………………………}

7. The instrument used in measuring the electric resistance.{…………………………..}

8. The electric current intensity is directly proportional to the potential difference between two terminals of a conductor at constant temperature.{…………………………..}

[4] Complete;

1. On connecting two charged conductors, the electric current passes from the conductor with …………….. potential to the conductor of …………….. potential.

2. ……………… is measured by voltmeter and has a measuring unit known as …………………

3. In the electric circuits, the ammeter is connected In ……………. ,while the voltmeter is connected in ……………

4. The ……….. is used to measure the electromotive force of a battery in unit known as ………………

5. ………….. apparatus is used to measure the resistance in the circuit.

6. The measuring unit of the resistance in the circuit is ………

7. The potential difference between the two terminals of a conductor is ……….. proportional to the intensity of the current passing through it at constant temperature.

[5] Give reason for;

1. When two conductors have the same potential are connected, no electric current passes.

2. The voltmeter is connected across the two poles of a battery.

3. Rheostat is used in some electric circuits.

[7] What happens when ………….. ?

1. The length of the rheostat wire increases .(to the electric circuit).

2. Potential difference between the terminals of a conductor is doubled at constant temperature. (for current intensity passing through it)

[9] Problems:

1. Calculate the quantity of electricity that passes through a conductor of a resistance 2200 ohm for two minutes, when it is connected with a source of electric potential 220 volts.

2. Calculate the potential difference between the two ends of a vacuum cleaner whose resistance is 22ohms And current intensity passing through it is 10 Ampere.

3. If an electric current of 0.2 ampere passes in an electric heater and the potential difference between its two ends is 220 volts, calculate the heater resistance.

4. What is the quantity of electricity which passes through a conductor its resistance 1000ohm for 30 minutes when the potential difference across its ends is 220 volts.

[10] Draw the electric circuit used to achieve Ohm's law, then state Ohm's law and its mathematical relation.

Sheet (8)

[1] Choose;

1. Direct current can be produced from ………………….

Electrochemical cells – electric generator – electric power station - electric motors

2. In the simple cell, the …………. Energy is converted into electric energy.

Kinetic – magnetic – chemical – mechanical

3. The direct current is used in ……………….

Lighting houses and streets – operating appliances – all of them

4. The direct current is produced from……………….

Electric generators – electrochemical cells –electric power stations

5. From the properties of direct current is that ……………….

Has constant intensity only – changeable direction – constant intensity & direction

6. To generate an alternating current we use the ……….

Rheostat – dynamo – ammeter – ohmmeter

7. In dynamo, …………… energy is converted into electric energy.

Magnetic - kinetic – chemical – light

8. Alternating current is characterized by …………….

Constant intensity only – variable direction only – variable intensity & direction – variable intensity only

9. On connecting four electric cells, the e.m.f. of each one is 1.5 volts in series, the total e.m.f. of the new battery equals ……….. volts.

(3 – 6 – 1.5 – 12)

[2] Put (√) or (X), then correct:

1. In electric cells and batteries, chemical energy is converted into electric energy.(   )

2. In dry cell, magnetic energy is changed to electric energy.(   )

3. Dynamo produces alternating current.   (   )

4. Electric current in houses is always direct current(   )

5. The e.m.f. of several cells which are connected in series is equal to e.m.f. of one cell. (   )

[3] Write the scientific term;

1. The electric current of constant intensity and direction.{……………………………….}

2. The electric current which is used in electroplating.{……………………………….}

3. A type of connection of electric cells used to obtain high e.m.f.{……………………….}

[4] Complete:

1. There are two types of electric current which are …………… and ……………….

2. The electric current ge3nerated from a dynamo is due to convert ……………… energy to ………………. Energy.

3. Electric cell produces …………… current, while the dynamo produces ……………… current.

4. The ……………. Electric current can be transported only for short distance.

[5] Give reason for:

1. It is better to use alternating current rather than the direct current.

2. Some electric cells are connected in electric circuits in series.

3. Some electric cells are connected in electric circuits in parallel.

4. The electromotive force of a battery whose cells are connected in series is greater than that one whose cells are connected in parallel.

[8] What is the importance of ;

1. Dry cell 2. Dynamo 3. Direct current 4. Alternating current

[9] Show by drawing:

1. A diagram representing alternating current.

2. Connecting of three cells in series and also in parallel.

[10] Problems:

1. You have three similar cells, the electromotive force of each is 1.5 volt. Explain by using a diagram, how you can connect them to obtain an e.m.f. of :

a) 1.5 volts b) 3 volts c) 4.5 volts

2. You have four similar electric cells, the electromotive force of each one is 1.5 volt. Illustrate by drawing how can you connect them to get batteries of e.m.f. of :

a) 6 volts b)4.5volts c) 3volt in two ways d) 1.5 volt

3. If you have 4 dry cells the e.m.f. of each of the 1^{st} & 2^{nd} is 1.5 volts, the 3^{rd} is 2 volts and the 4^{th} is 3 volts.

Explain by drawing how can you connect them to obtain a new battery of e.m.f. equals :

a) 8 volts b) 6.5 volts

Sheet (9)

[1] Choose:

1. The radioactive phenomena was discovered by the scientist ....
(Ohm – Becquerel – Ampere – Volt)

2. …………….. is a non-radioactive element.

Radium – Uranium – Zerconium – Iron

[2] Write the scientific term;

1. The process of conversion of atoms of some elements to reach more stability.
{…………………………..}

2. The natural spontaneous decaying of the atoms of some elements in nature as an attempt to reach a more stable composition. {………………………..}

3. The radiation and nuclear energy emitted during nuclear reactions that can be controlled and carried out at nuclear reactor. {………………………..}

4. Atoms of the same element with different number of neutrons and with the same number of protons.{……………………………………..……}

[3] Complete:

1. Nuclear energy is used in medicine in ……………. And …………… of some diseases.

2. Nuclear energy is used to convert sand to ………………sheets to be used in manufacturing of ………… Appliances.

[4] Give reason for;

1. The nuclei of radioactive elements are unstable.

2. Some elements are called radioactive elements.

3. Uranium is one of radioactive elements..

4. Radioactivity has natural sources and also artificial sources.

[6] Mention the importance of ;

1. Radioactive elements in medicine……………………………………………………………..

2. Nuclear energy in exploring space……………………………………………………………..

3. Nuclear energy in drilling…………………………………………………………………….

4. Nuclear energy in agriculture………………………………………………………………..

5. Nuclear energy in medical field:……………………………………………………………..

Sheet (10)

[1] Choose;

1. The …………… effects the radiation is a result of changing the sex chromosomes of the cells. **(Physical – genetic – cellular – none of them)**

2. The measuring unit of absorbed radiation is …………(Curie – rem – rontgen – ohm)

3. Human being should not be exposed to radiation in amounts more than ……………… Rem. **(5 – 3 – 8 – 10)**

[2] Write the scientific term;

1. The changes that take place to the living organism due to its exposure to radiations. {…………………………}

2. The measuring unit of absorbed radiation.{…………………..}

[3] Give reason for;

1. After Chernobyl accident, radioactive isotopes were found in the food products.

2. Radiation has genetic effects.

3. The areas chosen for storing radioactive wastes should be steady.

Sheet (11)

[1] Choose;

1. ……………. Is considered as the founder of modern Genetics science.

Mendleef – Mendel – Mozely – Morgan

2. The ………………. trait is always pure.

Acquired – hereditary – dominant – recessive

3. The result of the pollination between two pea plants, one hybrid yellow seeds and the other with green blue seeds is ……

100% green seeds – 100% yellow seeds – 50% green seeds & 50% yellow seeds.

[2] Put (√) or (X), then correct:

1. The acquired traits are transmitted from one generation to another. ( )

2. Mendel chose the bean plant to conduct his research.( )

3. The recessive trait is the trait that appears in all individuals of the 1st generation in Mendel's experiment. ( )

4. In the 1st law of Mendel, the two contrasting traits appear in the second generation by a ratio of 2 : 1. ( )

5. If the result of crossing between two individuals is 50% dominant and 50% recessive, this means that the parents are dominant. ( )

[3] Write the scientific term:

1. The traits ready to be transmitted from one generation to another. {……………………….}

2. The traits that are not transmitted from one generation to another. {……………………….}

3. The branch of science that aims to explain how different characteristics transfer through generation.{……………….}

4. A science that researches the transmission of the hereditary traits from one generation to another by studying the similarities and differences between the parents and the offspring. {…………………}

5. The trait that appears in all individuals of the 1st generation in Mendel's experiments. {………………………}

6. The appearance of a hereditary trait in the individuals of the 1st generation when two individuals are crossed, one of them carrying a pure hereditary trait contrasting by a trait carried by the other individual. {…………………………}

7. Through which the hereditary traits are transmitted from parents to offspring. {………………………}

8. The individual who carries a contrasting pair of genes, one is dominant and the other is recessive. {……………………..}

[4] Complete:

1. ………….. science researches the transmission of hereditary traits from parents to the offspring.

2. ……………… traits are not transmitted from one generation to another.

3. The scientist ………… Is the founder of heredity, he used the seeds of …………….. plant, because its flower are ………… and thus it can self - pollinate.

4. During Mendel's experiments , he removed the stamen from the flowers before they become mature to prevent ……………. Pollination, and he covered some flowers to prevent ………….. pollination.

5. The trait that appears in all individuals of the 1st generation in Mendel's experiment is …………….. trait.

[5] Give reason for:

1. Learn to walk in children is not considered a genetic trait.

2. The skill of playing basketball isn't hereditary trait.

3. Mendel selected (chose) the pea plant to conduct his experiments.

4. Mendel removed the stamens from flowers of the plant before the anther becomes mature.

5. Mendel covers the stigmas of the pistils of pea flower during the study of hereditary traits.

6. Mendel let pea plants for self- pollinate for several generations.

7. When a pure yellow pod pea plant is pollinated with pure green pod pea plant, they produce plants that all are with green pods.

8. When you pollinate a pure tall stemed pea plant with a short stemed pea plant , they produce all plants tall stemed.

[7] What happens when...........?:

1.Mendel didn't remove the stamens of the flowers of the pea plant that produces yellow seeds.

2. Pollination of peas flowers of hybrid yellow seeds with each other.

3. A dominant gene exists with a recessive one.

[9] Problems;

1. If crossing takes place between two pea plants , one of them of hybrid red flowers and the other of pure white flowers. Explain on the bases of genetic principles , the results of such crossing. Mention the ration of the obtained offspring.

2. In pea plant, what are the results of self-pollination of tall hybrid plat pure, by using the symbols (T,t) showing (parents – gametes – offspring)

3. Using the symbols to express the results of mating between a short stemed pea plant (tt) and a long stemed pea plant (TT).

4. If crossing takes place between two pea plants, one with pure red flowers and the other with white flower, explain on genetic bases the result of crossing between one of the 1st generation with plant of white flowers.

N.B. The red flower is symbolized by ® & the white flower is symbolized by (r)

5. When a pea plant that has tall stem is crossed with a pea plat that has short stem, this crossing produced individuals with the ratio of 50% tall : 50 % short.

What is the genetic structure of parents and producing individuals (use "T" for tall "t" for short.

6. If a black mouse BB is crossed to brown female mouse (bb). Mention the colors and ratios of the resulting offspring in the 1st generation and second generation . Illustrate on hereditary basis.

7. Mendel placed a group of assumptions (hypotheses) to explain the appearance of the dominant trait and the disappearance of the recessive trait in the first generation in the experiments that he carried with the pea plant. Explain these assumptions (briefly).

8. State the contribution of the scientist Mendel.

Sheet (12)

[1] Choose:

1. Which of the following trait is dominant in human being.

Smooth hair – blue colored eyes – attached ear lobe – absence of freckles

2. Which one of these traits is recessive in humans ?

Curly hair – Wide eye – Free ear lobe – straight hair

[2] Put (√) or (X), then correct;

1. When two individuals differ in two pairs or more of alternative traits copulate the trait of each pair is inherited together and appears in the second generation at ration 3:1.(   )

2. The ability to turn the tongue in a tube shape is dominant trait in human. (   )

[3] Write the scientific term:

1. The individual who carries a contrasting pair of genes, one is dominant and the other is recessive.{…………………………..}

2. When two individuals bearing a pair or more of alternative (contrasting) traits are crossed, the trait of each pair is inherited independently of the others and appears in the second generation at a ratio of 3:1.   {………………………………}

[4] Give reason for:

1. The curly hair trait dominates over the smooth hair trait.

2. The ability of rolling a tongue is dominant in the human being.

3. The free ear lobe is dominant over the attached ear lobe.

[6] Problem:

1. Explain on genetic principles the genetic composition of the individuals resulting from crossing a pea plant with short stem (tt) with a hybrid red flowers with another one hybrid tall stem and white flowers.

- Tall stem is symbolized by (T) - The red color is symbolized by (R)

2. What result is based on ? when two pea pure plants are crossed, one of them of long stem and red flowers and the other of short stem and white flowers for traits in the 1^{st} generation plants.

3. Explain by experiment to explain the law of independent assortment of hereditary factors.

Sheet (13)

[1] Choose:

1. ………… put the model of DNA molecule. **(Ohm – Mendel – Watson – Johansson)**

2. ……….. is the part of DNA in the cell nucleus. **(Gene – Gamete – Cytoplasm)**

3. …………. Is chemically composed of nucleic acid and DNA combined with protein.

(Cytoplasm – Chromosome – Gene)

[2] Put (√) or (X), then correct:

1. Genes are parts of DNA found in the cytoplasm of the cell. ( )

2. The chromosome chemically consists of a nucleic acid connected with protein.( )

3. Mendel made a model of DNA structure. ( )

[3] Give the scientific term;

1. Parts of DNA that are present on the chromosomes and carry the hereditary traits of the individual.{…………………………..}

2. It is chemically consisted of a nucleic acid called DNA combined with protein.
{…………………………..}

[4] Complete:

1. Chromosome is chemically composed of nucleic acid called ……………… which is combined with ……………….

2. The two scientists ………………. And ……………… were able to make model for DNA molecule.

3. The DNA consists of small consecutive units called ………… .

5. The two scientists ……………. And ………………discovered the means of how the gene controls in the appearance of the trait.

[6] Explain how the gene perform their function ?

Sheet (14)

[1] Choose;

1. The hormone which regulates the level calcium in the blood is ………………………

Calcitonin – thyroxin – progesterone – adrenalin

2. Calcitonin hormone is secreted from ………………..

Pancreas – thyroid gland – pituitary gland – parathyroid gland

3. The …………. hormone liberates the needed energy from the food stuff.

Growth – estrogen – thyroxin – testosterone

4. The hormone which its deficiency causes the enlargement of the thyroid gland is …………………..

Estrogen – insulin – thyroxin – glucagon

5. The hormone that stimulates the release of glucose sugar from liver is the ……………… hormone.

Thyroxin – insulin – parathormone – estrogen

6. Glucagon hormone is secreted by ……………….

Pituitary gland – thyroid gland – adrenal gland – pancreas

7. The hormone which stimulates the body's organs to respond for emergencies is ………………

Insulin – glucagon – estrogen – adrenalin

8. The hormone responsible for the appearance od secondary sexual male characters is the ……………. hormone.

Progesterone – testosterone – adrenalin – growth

9. The gland which secretes testosterone hormone is called ……

Pituitary gland – the two testes – thyroid gland – the two ovaries

10. The hormone responsible for the appearance of the female secondary sex characters is the ……………. Hormone.

Parathormone – estrogen – insulin – testosterone

[2] Put (√) or (X), then correct:

1. Hormones are secreted by the duct glands ( )

2. Pituitary gland secretes a hormone that organizes the growth of the body.( )

3. Thyroid gland secretes a hormone that organizes the growth and development of sexual organs in the human body.( )

4. Dwarfism is the continual growth of human limb's bones, so the person becomes a giant. ( )

5. The calcitonin hormone controls the level of calcium in the human body.( )

6. The glucagon hormone is secreted by pituitary gland.( )

7. The iron element shares in composing thyroxin hormone.

8. The adrenal gland secretes parathormone hormone which stimulates body's organ to respond to emergencies. ( )

9. Exophthalmic goiter is resulted due to thyroxin hormone deficiency. ( )

10. Feedback is the mechanism with which hormones act in the human body.( )

[3] Give the scientific term:

1. Organs secreting hormones in the human body.{……………..}

2. They are ductless glands that secretes their hormones directly in the blood without passing through ducts.{…………}

3. A chemical message that controls and regulates the activities and functions of most of the body organs.{…………………………}

4. A gland secretes a hormone that regulates the growth of the human sexual organs. {…………………….}

5. A hormone which stimulates body's organs to respond emergencies.

{……………………..}

6. A hormone which stimulates the storage of glucose sugar in liver.

{……………………..}

7. A hormone which appears the female secondary sex characters.

{……………………..}

8. Mechanism with which hormones act to achieve the homeostasis in the human body.

{…………………….}

9. The result when one of the endocrine glands does not act properly.

{…………………….}

[4] Complete:

1. A chemical substance that controls and regulates the functions of most of body organs is known as ………………..

2. Hormones are directly secreted into the blood stream by ……………………..

3. ……………….. gland secretes ……………… hormone which controls the general growth of the body.

4. Deficiency of ……………. hormone during …………… stage causes dwarfism.

5. Thyroxin is a ……………. That regulates food stimulation in your body.

6. When the amount of iodine decreases in the food, the secretion of the ……………. Hormone decreases from ……………….. gland.

7. When the amount of glucose sugar decreases in the blood , pancreas secretes ………………… hormone

8. The ……………… hormone is secreted when the rate glucose sugar increases in the blood.

9. When glucose level increased in the blood , the pancreas secretes hormone which stimulates the body's cells to absorb …………………. From the blood.

10. Deficiency of insulin hormone secretion causes …………

[5] Give reason for:

1. Endocrine glands are called by this way.

2. Blood stream is the only way for hormones to reach their sites of action.

3. Pituitary gland is called master gland.

4. Pituitary gland plays an important role in delivery and breast feeding process.

5. The height of some persons may exceed 2 meters.

6. The height of some persons may reachless than half meter.

7. The limb's bones of some people grow continuously, so they become giant.

8. The stopping of the body growth , so the person becomes a dwarf.

9. Thyroid gland plays an important role in controlling the level of calcium in the blood.

10. The two adrenal glands have an important role when man is exposed to emergency.

11. Pancreas is a double function gland.

12. Diabetes disease is treated with insulin hormone.

كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

